



FIG.1A

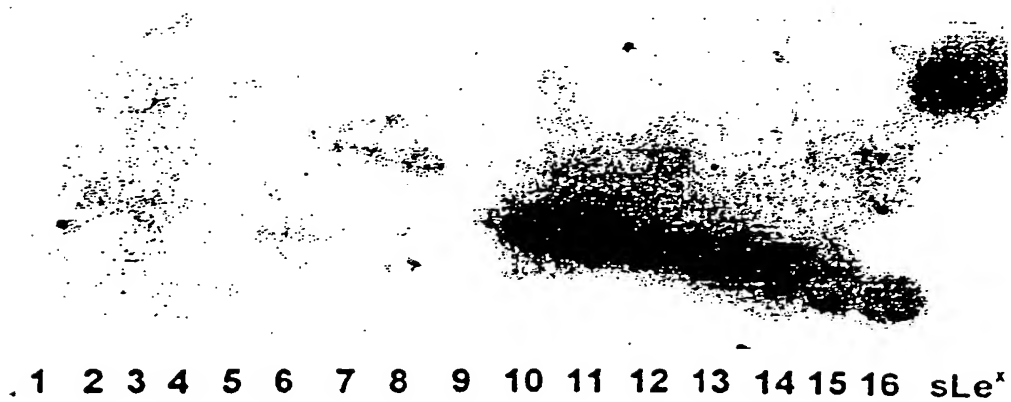


FIG.1B

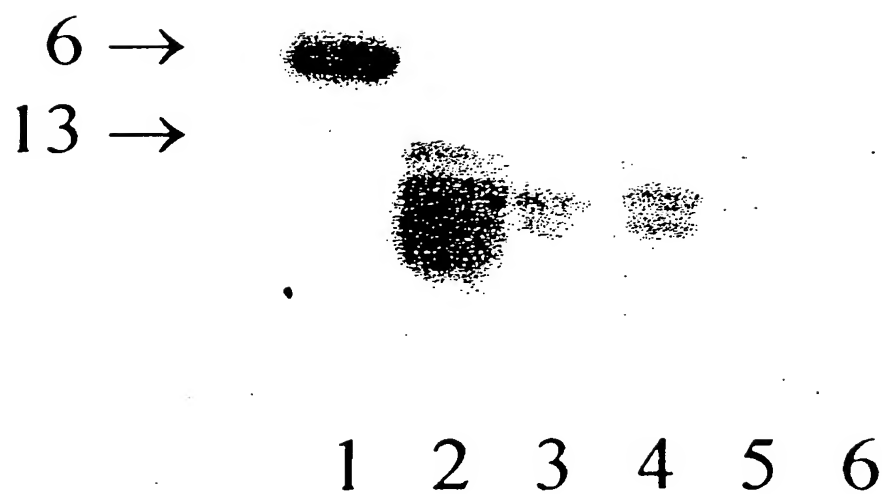


FIG.2

1 2 3 4 5 6

FIG. 3A

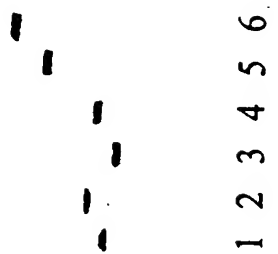
1 2 3 4 5 6

FIG. 3B

1 2 3 4 5 6

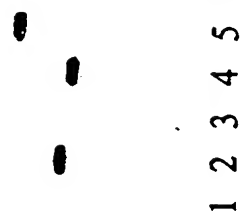
FIG. 3C

4/23



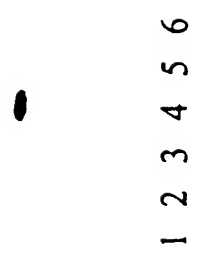
1 2 3 4 5 6

FIG.3F



1 2 3 4 5 6

FIG.3E



1 2 3 4 5 6

FIG.3D

XII XI X IX VIII VII VI V IV III II I
 Gal β 4GINAc β 3Gal β 4-GINAc β 3Gal β 4GINAc β 3Gal β 4GINAc β 3Gal β 4GlcCer
 3 \uparrow
 α SA Fuc α 1

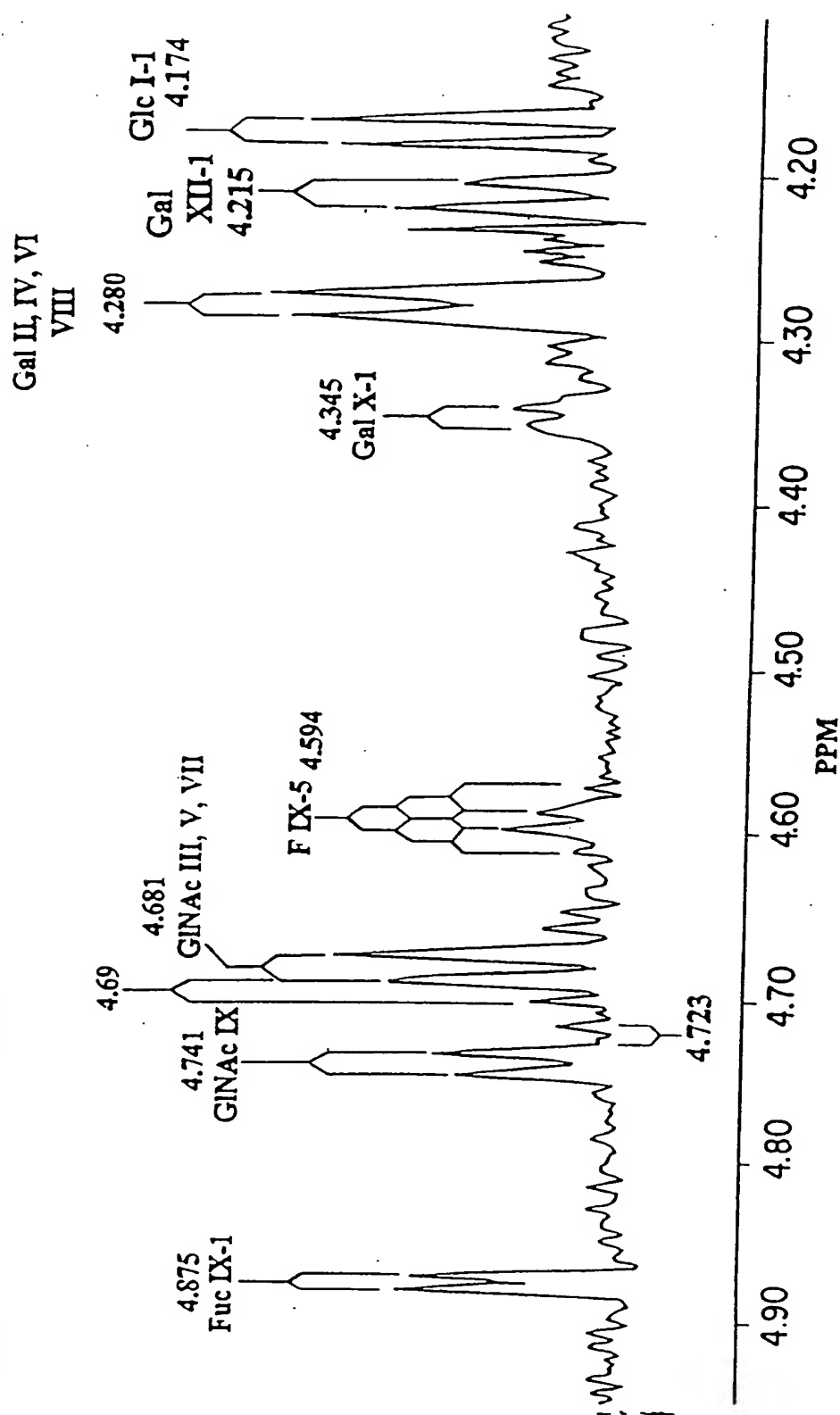


FIG. 4A

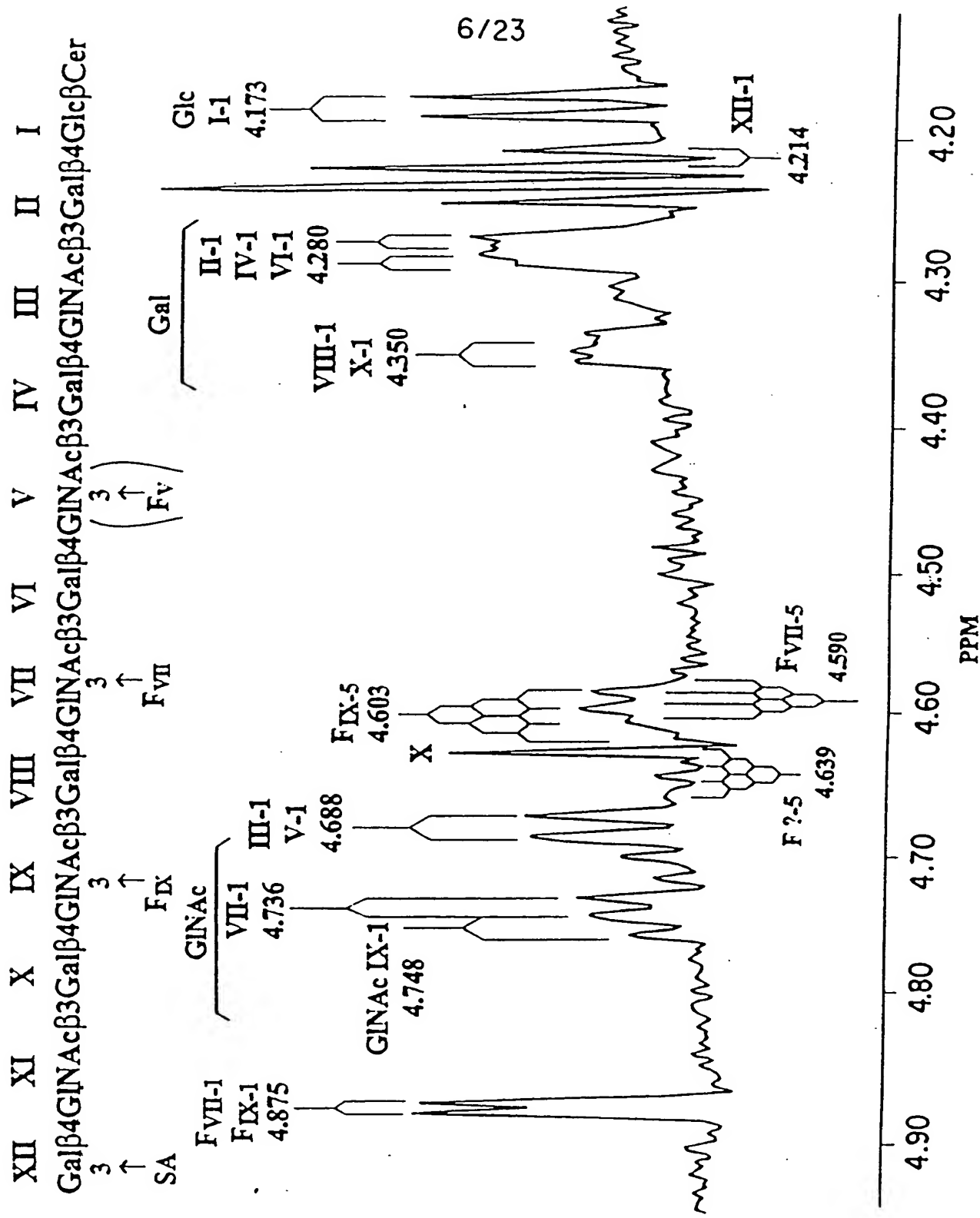
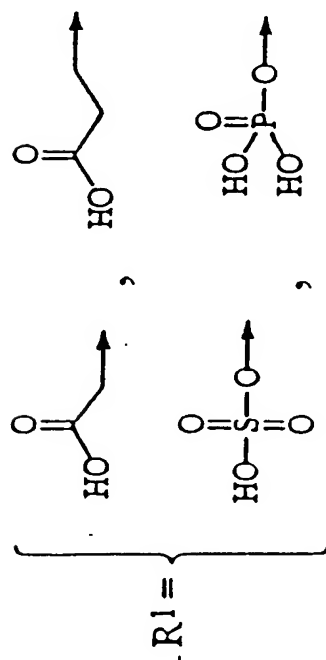
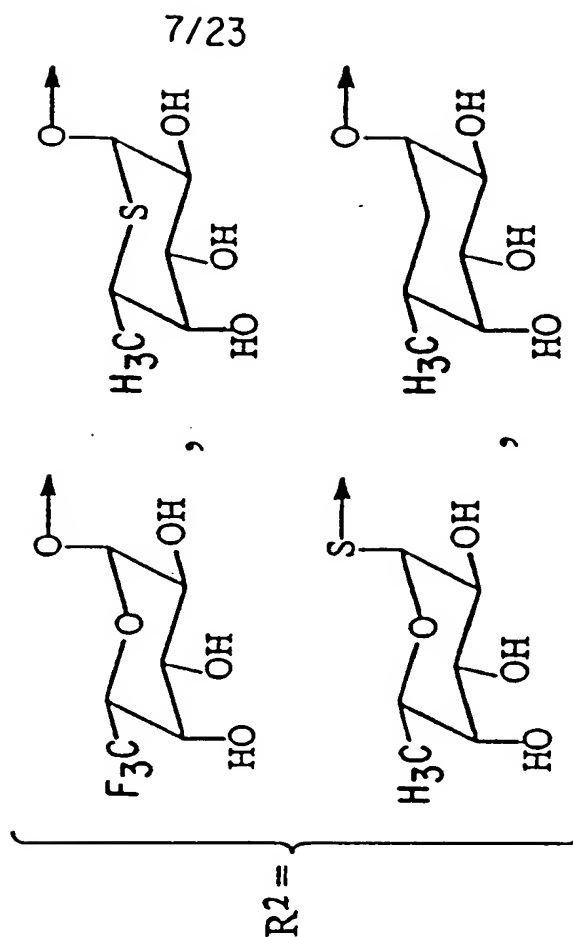
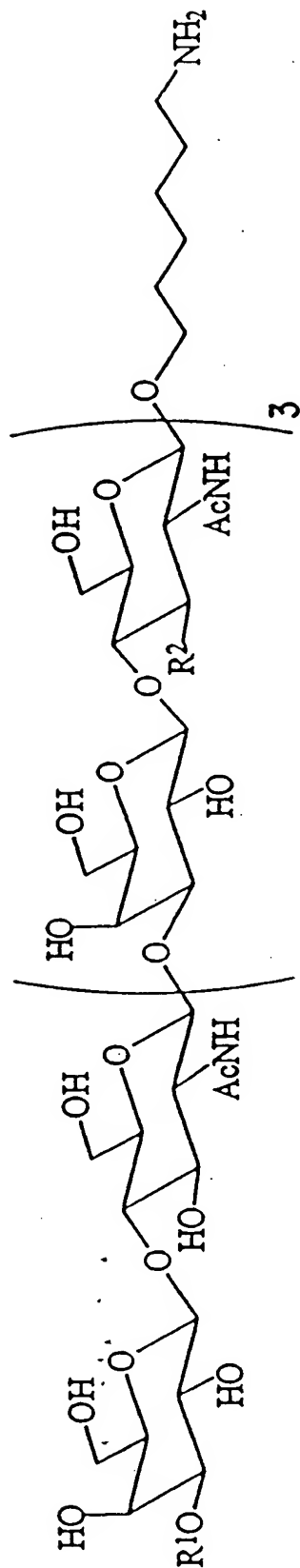


FIG.4B



Myeloglycan mimetics

FIG. 5

Scheme I. Synthesis of Starting Material 4

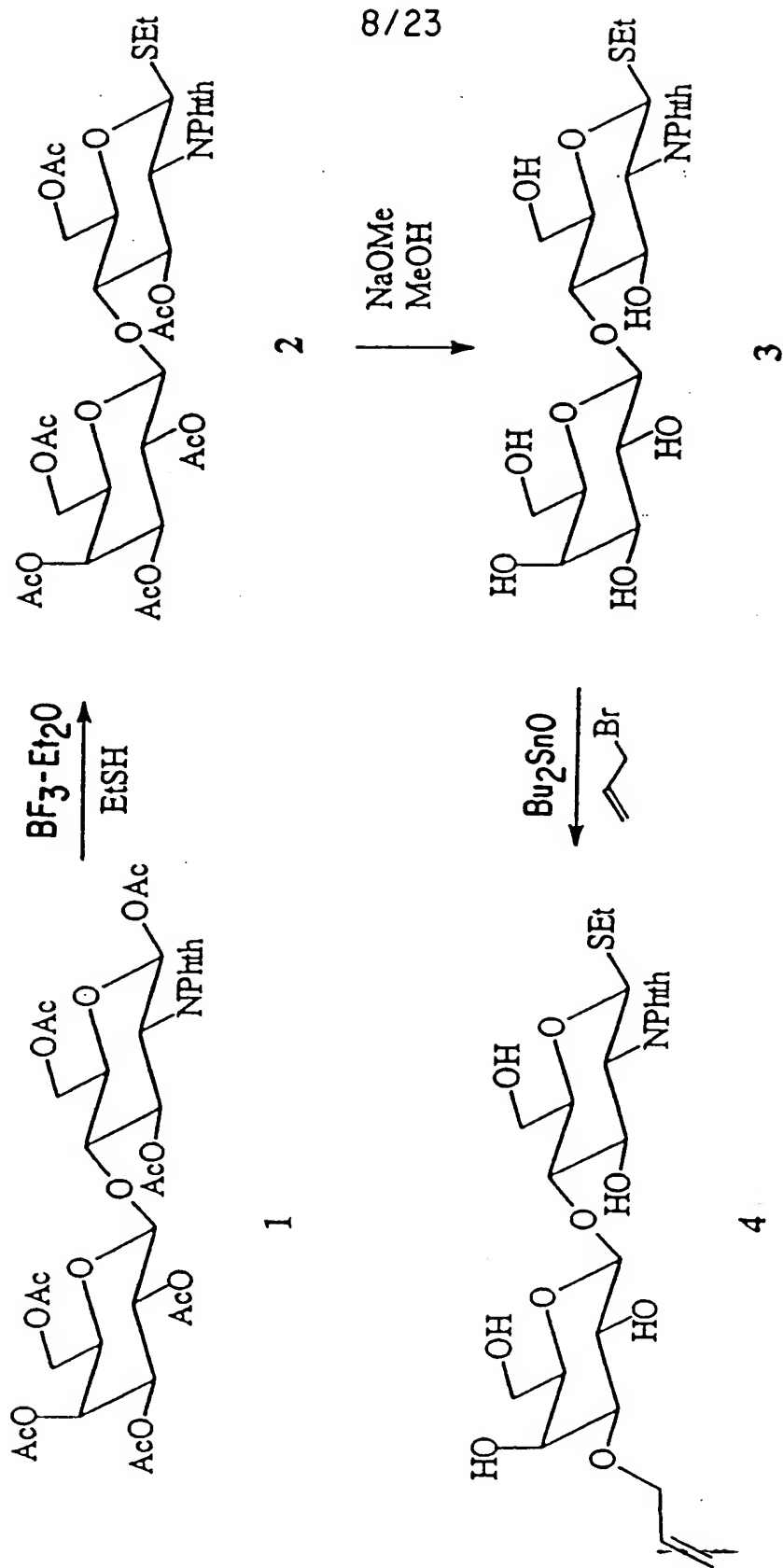


FIG. 6

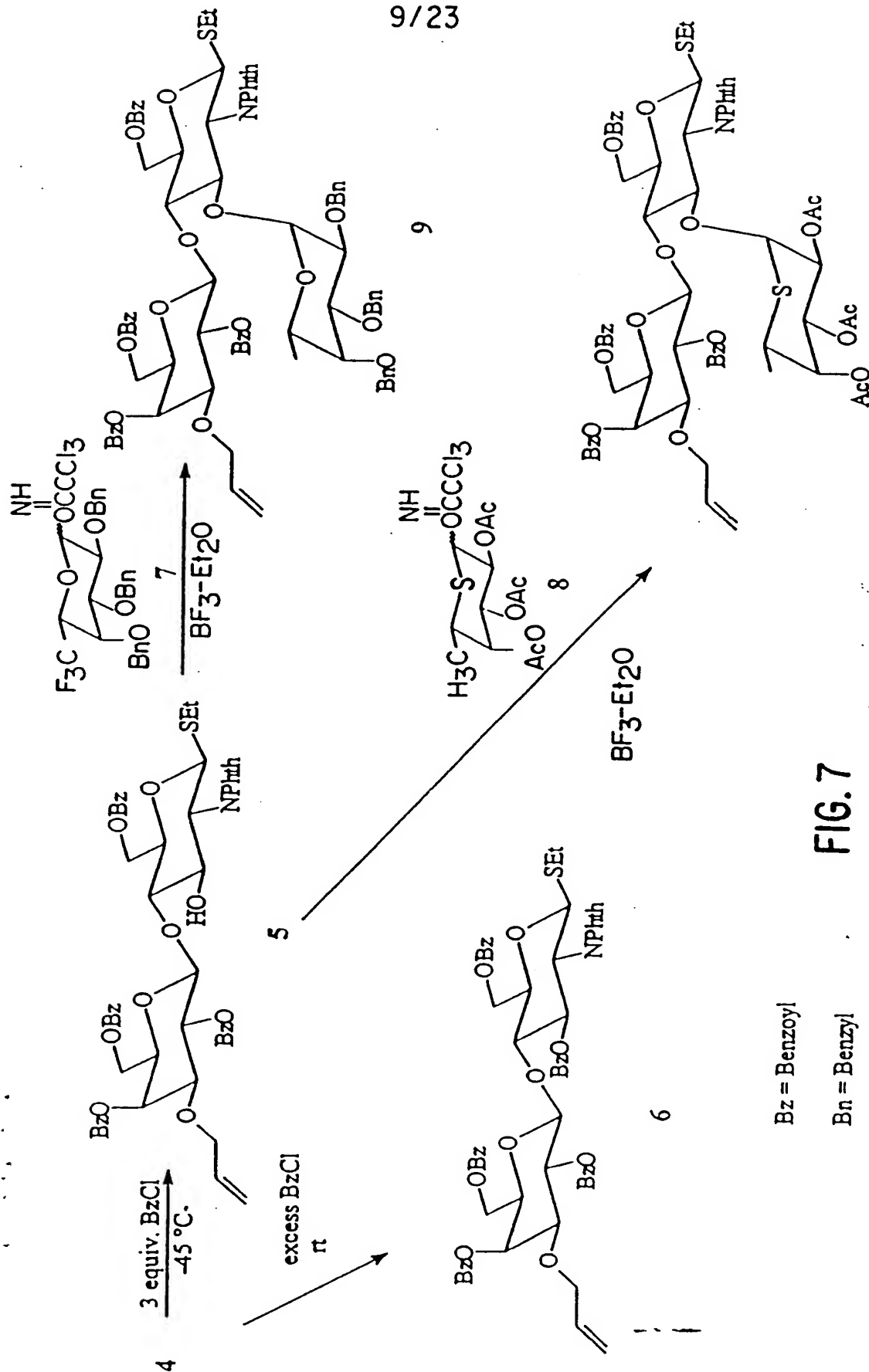
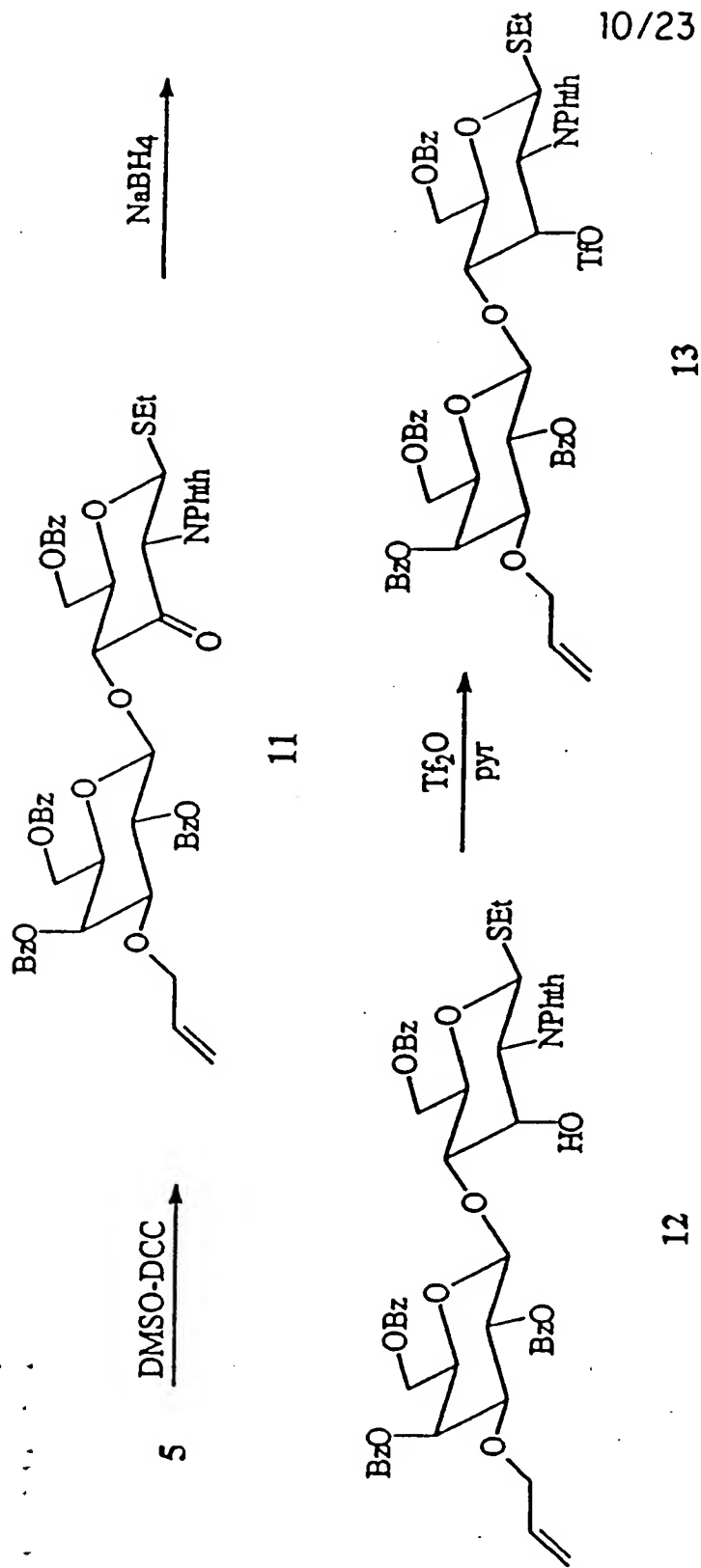
Scheme II. Synthesis of Lex Mimetics with CF₃-Fuc and 5-S-Fuc

FIG. 7

Scheme III. Synthesis of Triflate 13



10/23

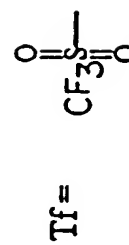
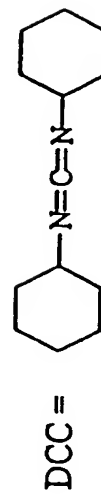


FIG. 8

Scheme IV. Synthesis of Lex Mimetics with 1-S-Fuc and C-Fuc

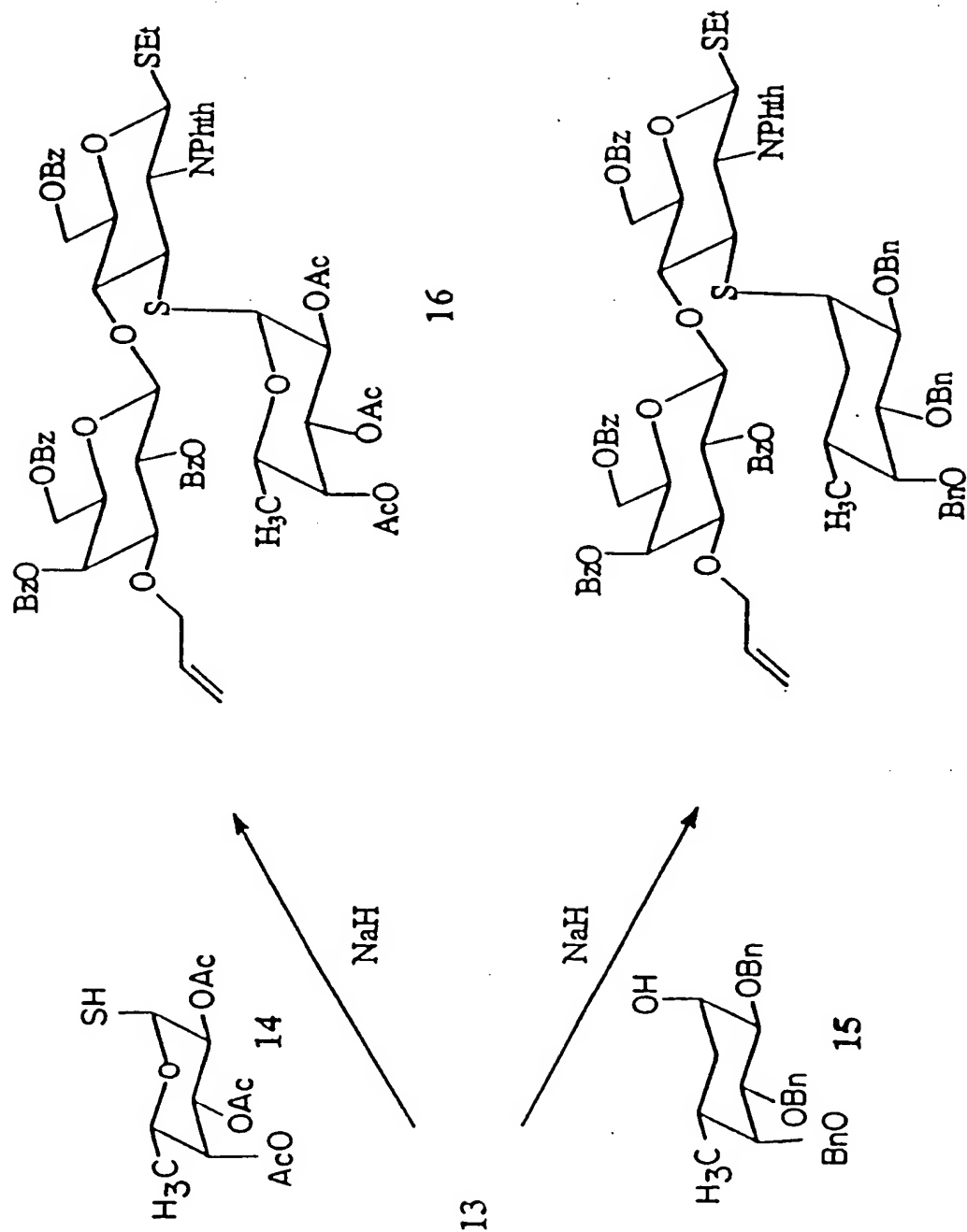


FIG. 9

Scheme V. Attachment of a Tether to L α Mimetics

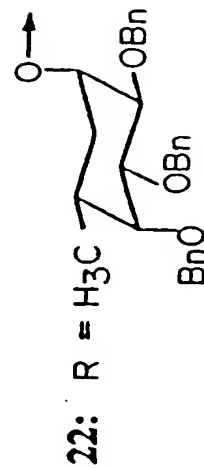
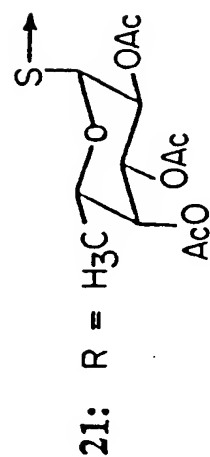
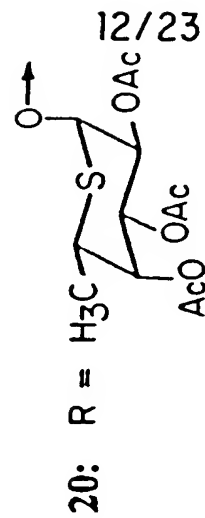
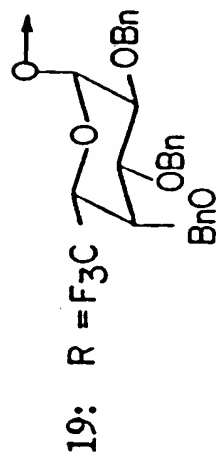
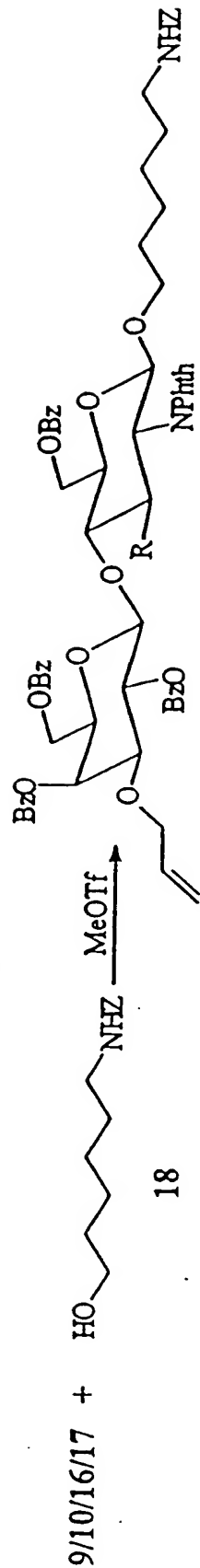
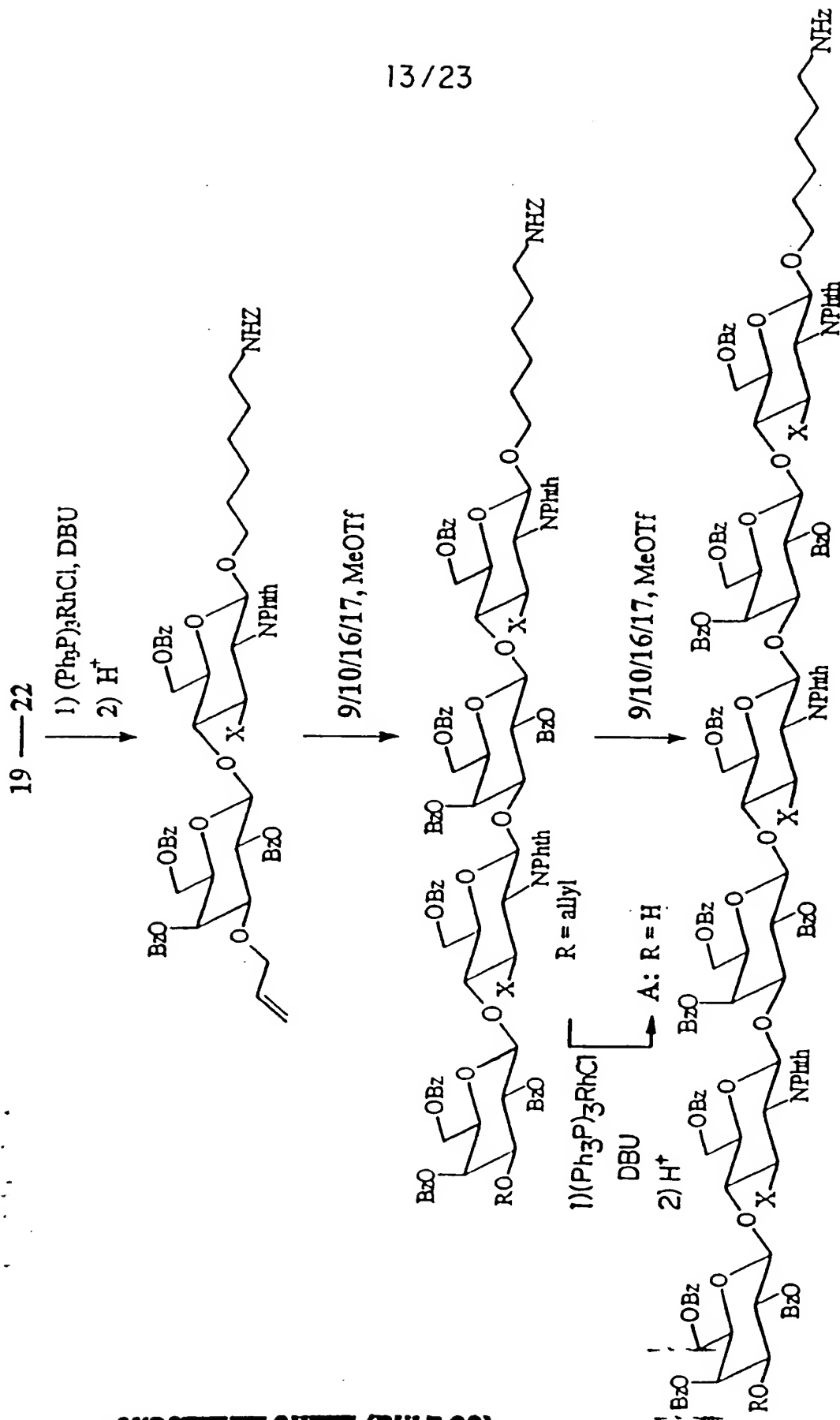


FIG.10

Scheme VI. Synthesis of Dimeric and Trimeric L α Mimetics



SUBSTITUTE SHEET (RULE 26)

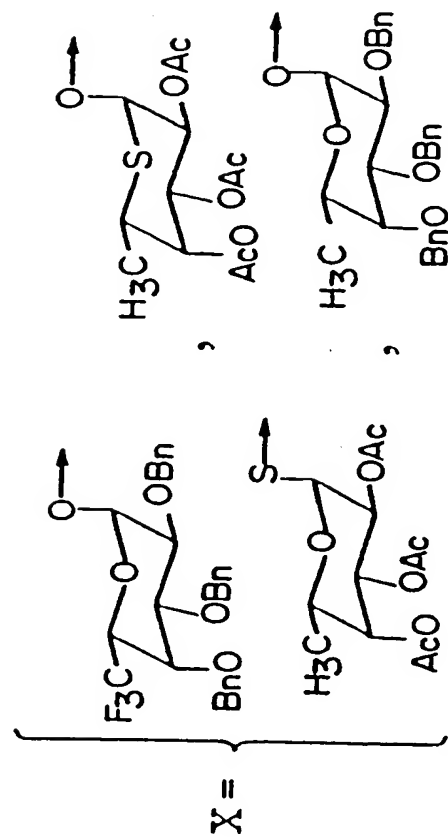
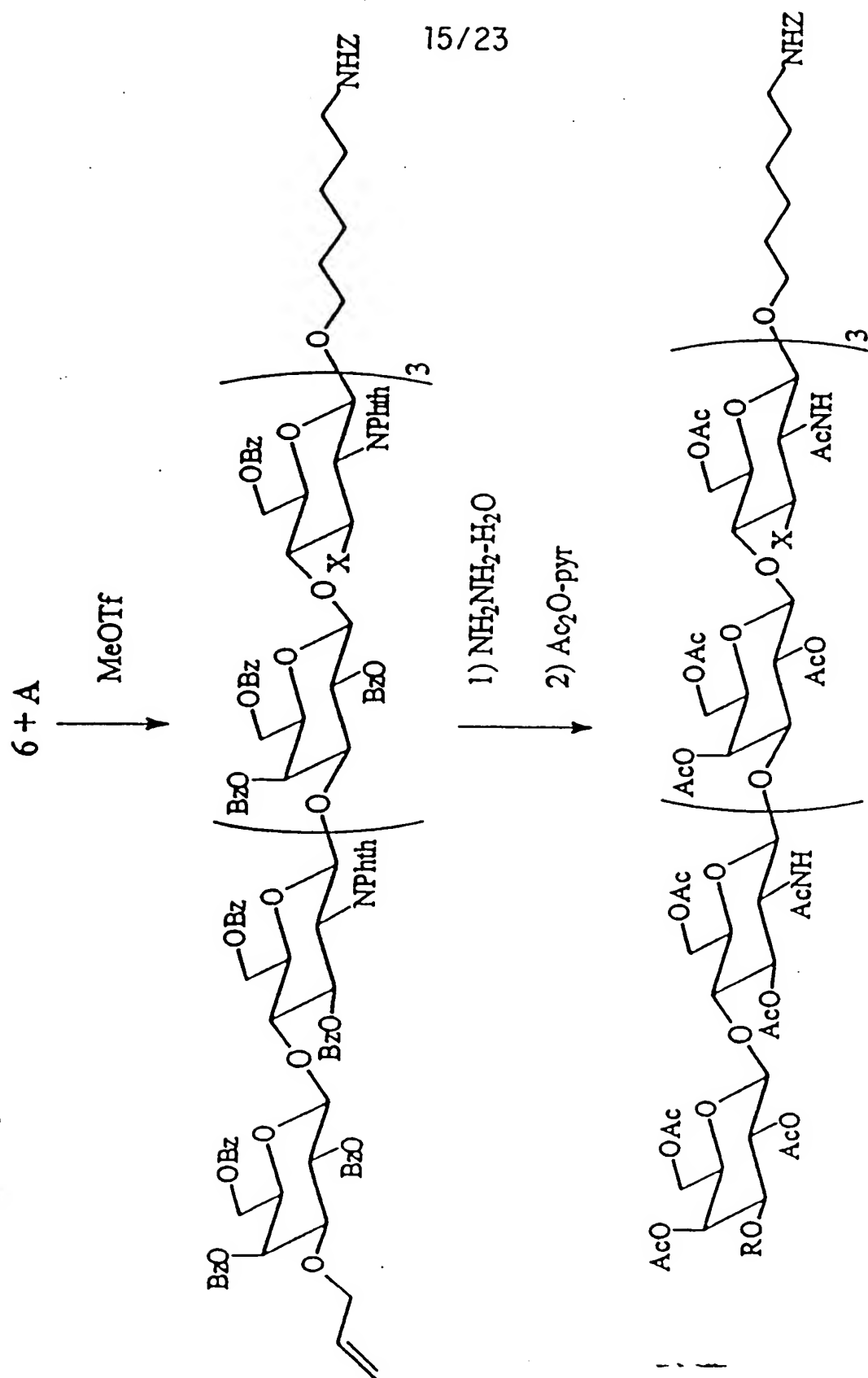


FIG.11B

Scheme VII. Synthesis of Tetralactosamine Core



1) $(\text{Ph}_3\text{P})_3\text{RhCl}$

DBU

2) H^+

B: R = allyl

C: R = H

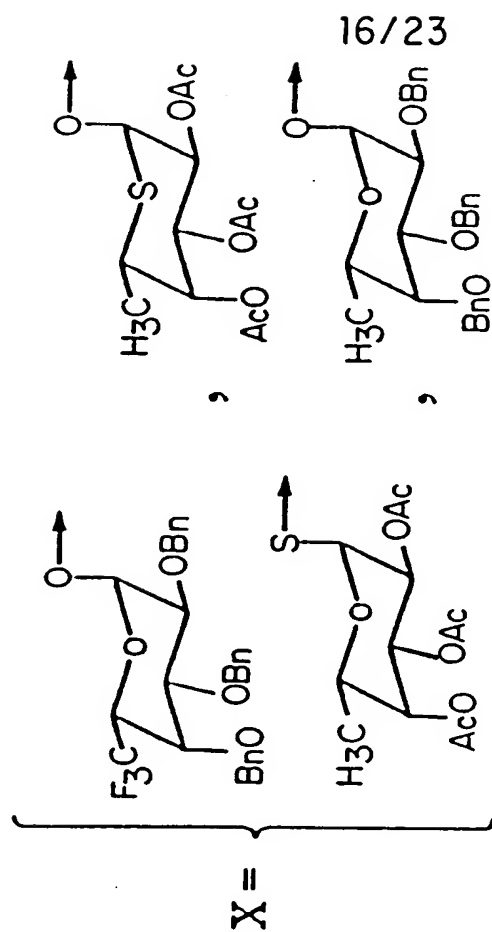


FIG.12B

Scheme VIII. Synthesis of Myeloglycan Mimetics

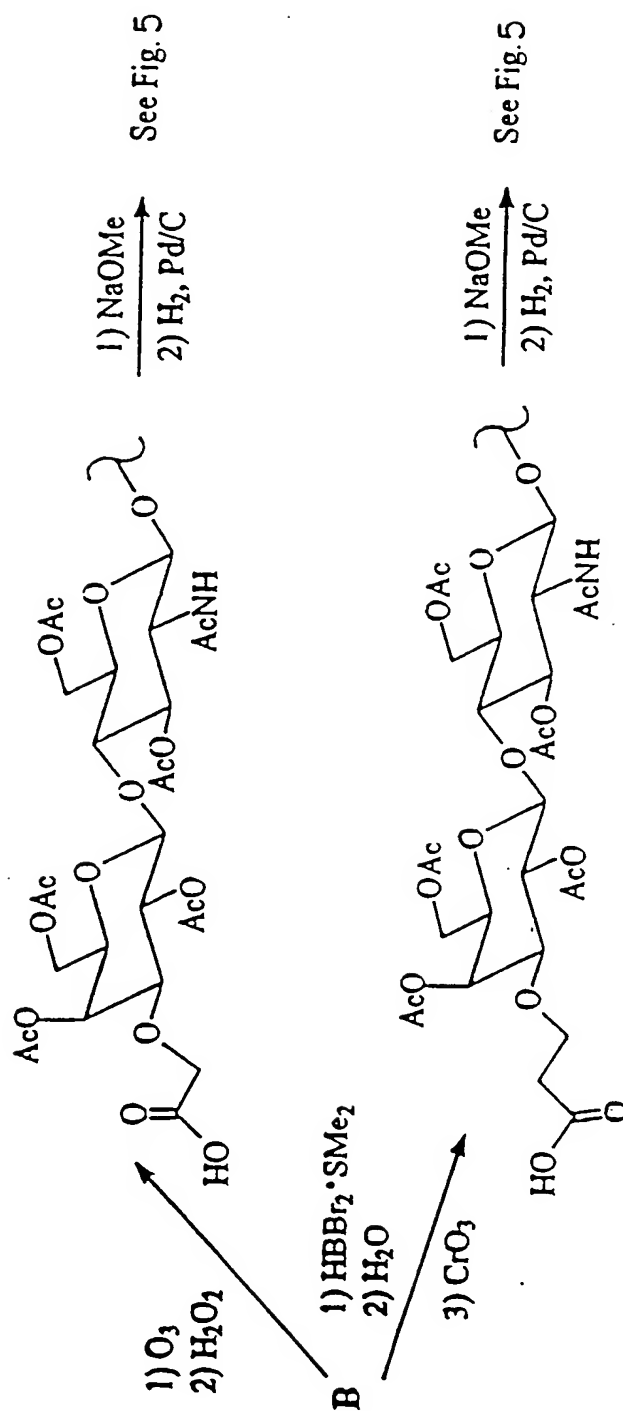


FIG.13A

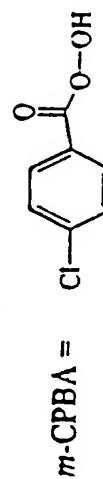


FIG. 13B

Scheme IX. Starburst Structure

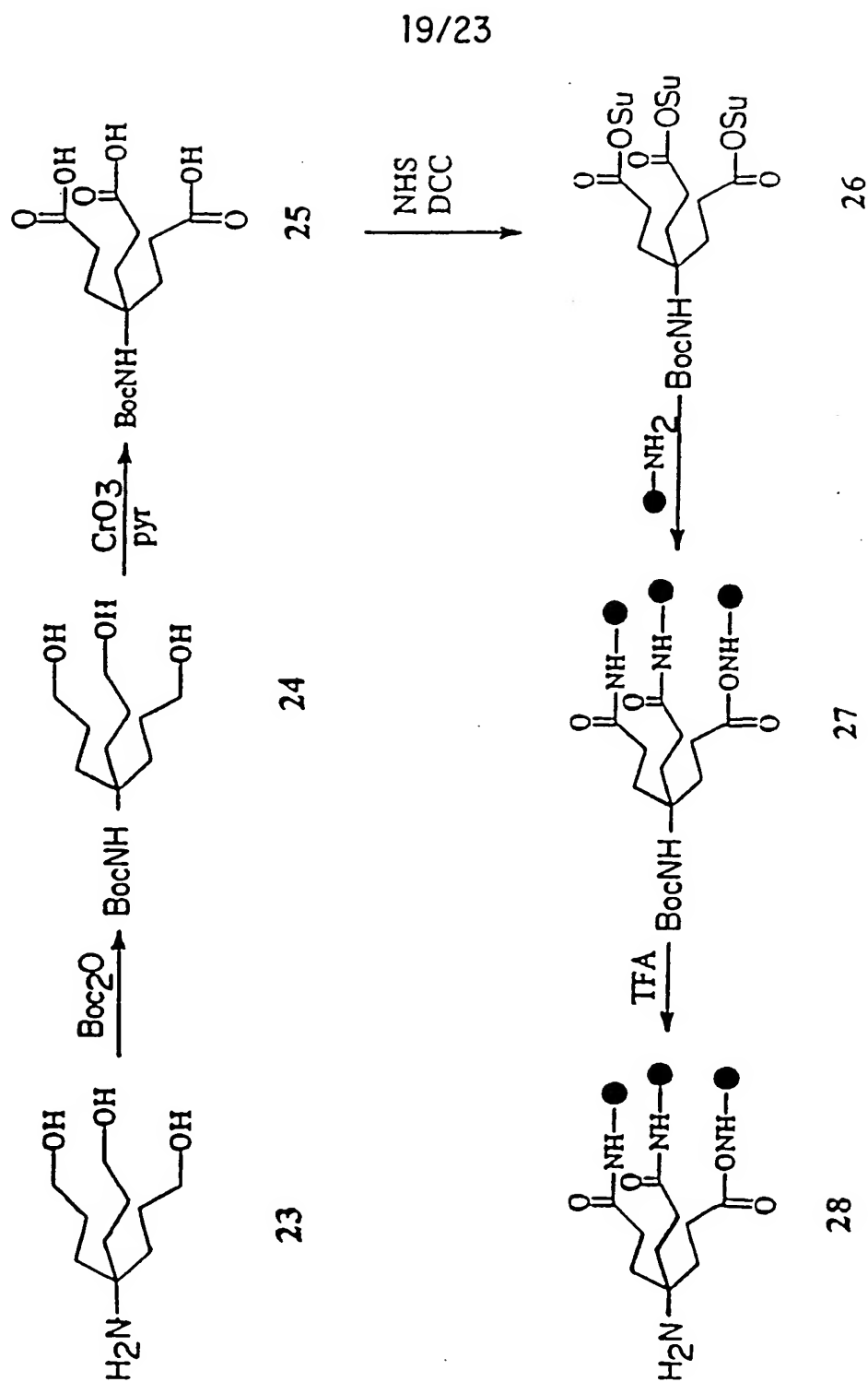
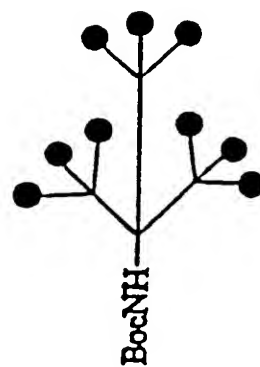
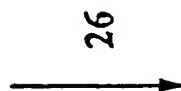


FIG.14A

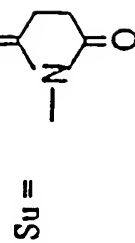
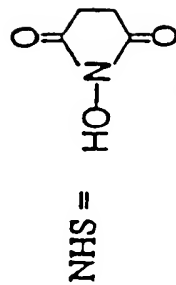
Scheme IX. Starburst Structure

28



29

Boc = *tert*-Butoxycarbonyl



●-NH₂ = Myelloglycan mimetics

FIG. 14B

Scheme X. Liposomes

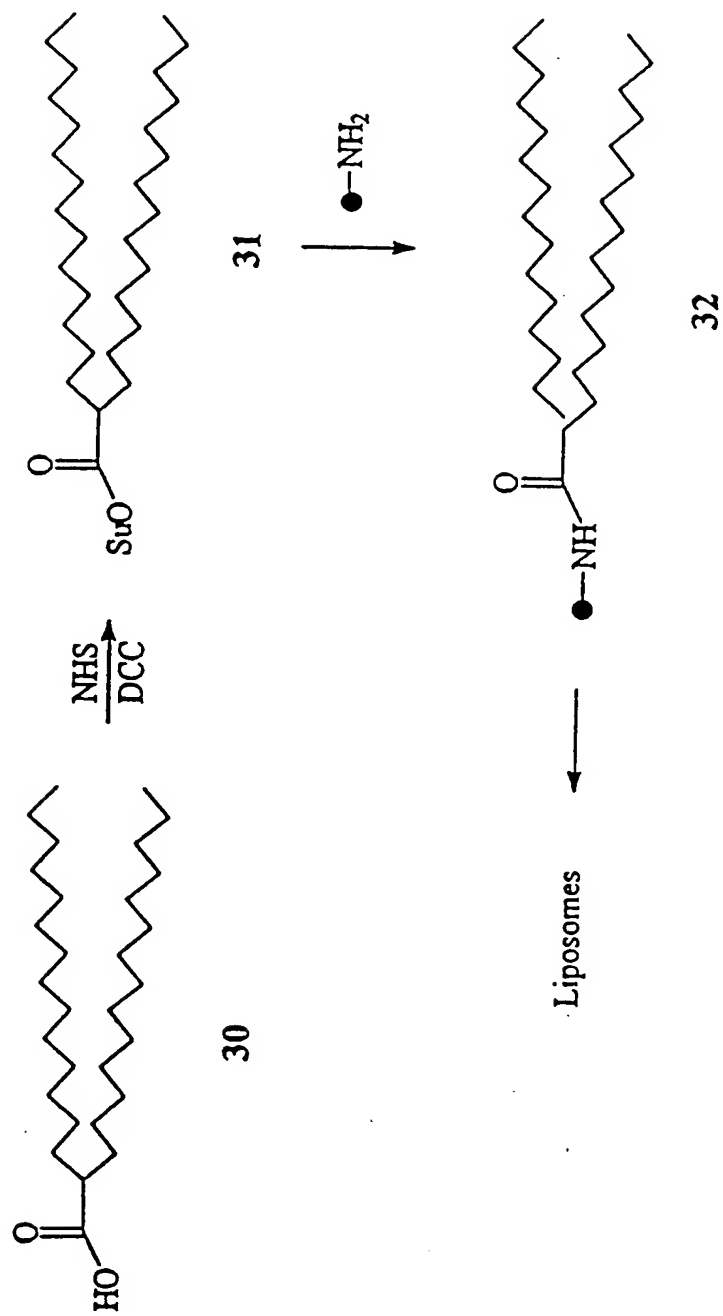


FIG.15A

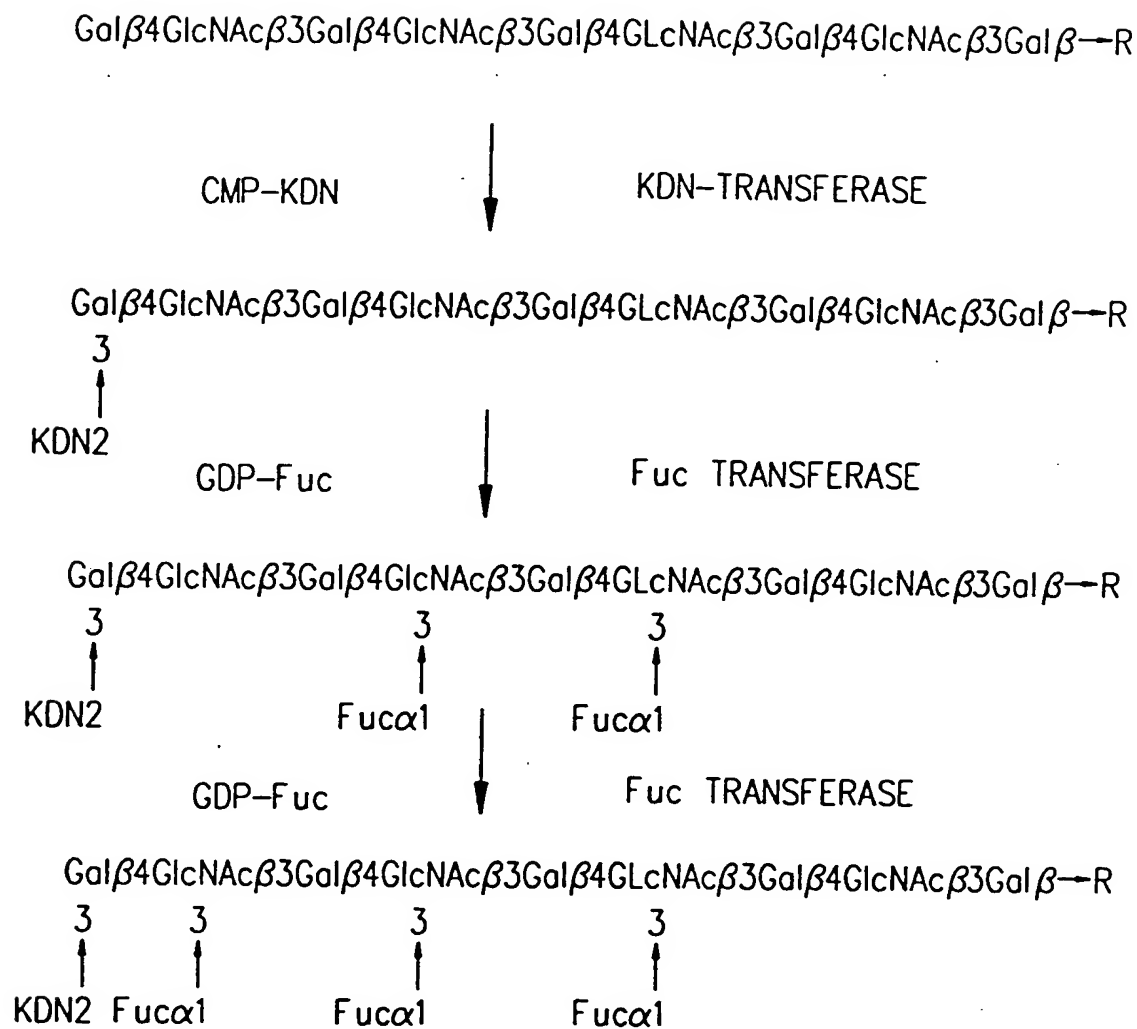


FIG.16

Scheme XI. Polymerization

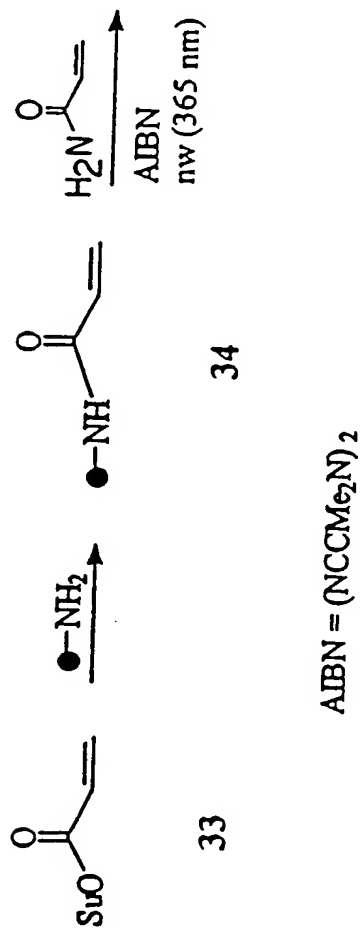


FIG. 15B